In the Claims:

1. (previously presented) Method for producing alloy wheels for motor vehicles, each wheel (1) comprising a hub (3) and a rim (5); the method including realising a finishing operation with a cutting machine tool; the method comprising the steps of measuring the unbalance of said wheel (1), and checking whether said unbalance is lower than an unbalance acceptability value ($M1_{max}$; $M2_{max}$) by means of a control unit (35); calculating a mass (M1; M2) to be removed and the respective phase (F1; F2) with respect to a determined point on the wheel (1); said unbalance being identified by said mass (M1; M2) and by said phase (F1; F2); the method being characterised by calculating a first mass and a second mass (M1, M2) to be removed and the respective first and second phase (F1, F2), said first and second mass (M1; M2) being separated from each other along the axle (2) of the wheel (1).

2. (previously presented) Method according to claim 1, characterised by calculating a first and a second simulated mass (MS1, MS2) and the respective first and second simulated phase (FS1, FS2) in working conditions of the wheel (1), said first and second simulated mass (MS1; MS2) being separated from each other along the axle of the wheel; and by removing the first simulated mass (MS1) when the first simulated mass (MS1) is not lower than a first unbalance acceptability value ($M1_{max}$) and by removing the second simulated mass (MS2) when the second simulated mass (MS2) is not lower than a second unbalance acceptability value ($M2_{max}$).

3. (previously presented) Method according to claim 2, characterised by removing the first and the second simulated mass (MS1; MS2) from the wheel (1) to compensate the unbalance when the unbalance is not acceptable.

4. (previously presented) Method according to claim 3, characterised in that the finishing machining process, the checking of unbalance and the possible removal of the first and second simulated mass (MS1; MS2) are carried out on a single cutting machine tool (24).

5. (currently amended) Method according to ~~one of the claims from~~ claim 2 ~~to 4~~, characterised by calculating the first and second simulated mass (MS1; MS2) according to the first and second mass (M1; M2) and the first and second phase (F1; F2) and the mass of a valve (MV) and the phase of the valve (FV).

6. (currently amended) Method according to ~~any one of the claims from~~ claim 2 ~~to 5~~, characterised by calculating a first and second geometry (G1; G2) of the respective first and second simulated mass (MS1; MS2) according to the geometry (GR) of the wheel (1) and the specific weight (PR) of the wheel (1).

7. (previously presented) Method according to claim 6, characterised by calculating the first and second geometry (G1; G2) of said first and second simulated mass (MS1; MS2) according to the type of machining (LT) selected.

8. (previously presented) Method according to claim 7, characterised by determining the first and second coordinates (C1; C2) of said first and second geometry (G1; G2) with respect to a point of reference on the wheel (1).

9. (previously presented) Method according to claim 8, characterised by transferring the first and second coordinates (C1; C2) to a numerical control (38) of the cutting machine tool (24).

10. (previously presented) System for producing alloy wheels for motor vehicles, each wheel (1) comprising a hub (3) and a rim (5); the system comprising a cutting machine tool for carrying out finishing operation; the system comprising means for detecting (14; 40) the unbalance of said wheel (1) and means for checking (19; 46; 50; 51) whether said unbalance falls within an unbalance acceptability value ($M1_{max}$; $M2_{max}$); means for calculating a mass (M1; M2) to be removed and the respective phase (F1; F2) with respect to a determined point on the wheel (1); said unbalance being identified by said mass (M1; M2) and by said phase (F1; F2); the system being characterised by comprising means for calculating a first mass and a second mass (M1, M2) to be removed and the respective first and second phase (F1, F2) with respect to a determined point of the wheel (1), said first and second mass (M1; M2) being separated from each other along the axle (2) of the wheel (1).

11. (previously presented) System according to claim 10, characterised by comprising means for calculating (17; 44) a first and second simulated mass (MS1; MS2) to be removed from the wheel (1) to correct the unbalance of the wheel (1) in working condition and the respective simulated phase (FS1; FS2).

12. (previously presented) System according to claim 11, characterised by comprising means for checking (19; 46; 50; 51) the first and second simulated mass (MS1; MS2) of the unbalance acceptability with respect to a first and second unbalance acceptability value ($M1_{max}$; $M2_{max}$).

13. (currently amended) System according to ~~one of the claims from 15 to 19~~ claim 12, characterised by comprising a cutting machine tool for removing said simulated mass (MS; MS1; MS2) from said wheel (1) to compensate the unbalance, when at least one of the first

and the second mass (MS1; MS2) is not lower than the respective first and second unbalance acceptability value ($M1_{max}$; $M2_{max}$).

14. (previously presented) System according to claim 13, characterised in that said cutting machine tool (24) comprises sensors (36, 37; 36, 37, 39) for detecting unbalance, a control unit (35) for calculating the first and second simulated mass (MS1; MS2) and the respective first and second phase (FS1; FS2) and the first and second coordinates (C1; C2) of said first and second simulated mass (MS1; MS2), and a numerical control (38) suited to acquire said coordinates; said cutting machine tool (24) being suited to carry out the machining finishing operation, to check the unbalance and eventually to remove the first and second simulated mass (MS1; MS2).

15. (previously presented) System according to claim 13, characterised in that said cutting machine tool (24) comprises a sensors for detecting the dynamic unbalance (36, 37; 36, 37, 39) and means for calculating the first and second mass in correspondence of a first and a second plane along the axis of said wheel.